

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An electronic circuit comprising:

a first power source line; and

a plurality of unit circuits,

each of the plurality of unit circuits including:

a first transistor that is coupled to an electronic element and that is coupled to the first power source line;

a second transistor that controls an electrical connection between a drain of the first transistor and a gate of the first transistor; and

a third transistor that controls an electrical connection between the first transistor and a current source that outputs a data current that sets a conduction state of the first transistor,

the first power source line being electrically disconnected from a driving potential during at least a part of a first period in which the third transistor is in an on-state, and

~~a driving current whose level corresponds to the conduction state of the first transistor set by the data current flowing between the first power source line and the electronic element during at least a part of a second period in which the third transistor is in an off-state.~~
a driving current flowing between the first power source line and the electronic element during at least a part of a second period in which the third transistor is in an off-state,
and

the driving current having a level corresponding to the conduction state of the first transistor set by the data current.

2. (Currently Amended) An electronic circuit comprising:

a first power source line; and

a plurality of unit circuits,

each of the plurality of unit circuits including:

a first transistor that is coupled to an electronic element and that is coupled to the first power source line;

a second transistor that controls an electrical connection between a drain of the first transistor and a gate of the first transistor; and

a third transistor that controls an electrical connection between the first transistor and a current source that outputs a data current that sets a conduction state of the first transistor,

the data current flowing through the first transistor during at least a part of a first period in which the third transistor is in an on-state,

a potential of the first power source line being set to a first voltage during at least a part of the first period,

a driving current flowing between the first power source line and the electronic element during at least a part of a second period in which the third transistor is in an off-state,

the driving current having whose a level corresponds corresponding to the
conduction state of the first transistor set by the data ~~current flowing between the first power~~
~~source line and the electronic element during at least a part of a second period in which the~~
~~third transistor is in an off state, current, and~~

the potential of the first power source line being set to a second voltage that is different from the first voltage during at least a part of the second period.

3. (Currently Amended) An electronic circuit comprising:

a plurality of unit ~~circuits~~circuits; and

_____ a first power source line,

each of the plurality of unit circuits including:

a first transistor having a first terminal, a second terminal, and a first control terminal;

a second transistor having a third terminal and a fourth terminal; and

a third transistor having a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal,

_____ a conduction state between the first terminal and the second terminal being set according to a voltage of the first control terminal,

the first terminal being coupled to ~~a first~~the first power source line; and

a potential of the first power source line being set to a plurality of potentials or an electrical connection between the first power source line and a driving voltage being controlled.

4. (Currently Amended) An electronic circuit ~~having a plurality of unit circuits, each of the plurality of unit circuits comprising:~~

_____ a first power source line;

_____ a control circuit that sets the potential of the first power source line to a plurality of potentials or controls an electrical connection between a driving voltage and the first power source line; and

_____ a plurality of unit circuits,

_____ each of the plurality of unit circuits including:

_____ a first transistor having a first terminal, a second terminal, and a first control terminal;

_____ a second transistor having a third terminal and a fourth terminal, the third terminal being coupled to the first control terminal, the second transistor controlling an electrical connection between the second terminal and ~~the third~~ the first control terminal;

_____ a third transistor having a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal; and

_____ a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal,

_____ a conduction state between the first terminal and the second terminal being set according to a voltage of the first control terminal, and

the first terminal being connected to ~~a first~~ the first power source line. line together with the first terminals of other unit circuits of the plurality of unit circuits, and

~~_____ the electronic circuit including a plurality of control circuits, each setting the potential of the first power source line to a plurality of potentials or controlling the supply and the disconnection of a driving voltage to the first power source line.~~

5. (Currently Amended) An electronic circuit comprising:

_____ a first power source line;

_____ a second power source line that is held at a predetermined potential;

_____ a control circuit that sets the potential of the first power source line to a plurality of potentials or controls an electrical connection between a driving voltage and the first power source line; and

_____ a plurality of unit circuits,

_____ each of the plurality of unit circuits including:

~~having a plurality of unit circuits, each of the plurality of unit circuits comprising:~~

_____ a first transistor having a first terminal, a second terminal, and a first control terminal;

_____ a second transistor having a third terminal and a fourth terminal, the third terminal being coupled to the first control terminal, the second transistor controlling an electrical connection between the second terminal and the ~~third~~ first control terminal;

_____ a third transistor having a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal; and

_____ a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal,

_____ a conduction state between the first terminal and the second terminal being set according to a voltage of the first control terminal,

the first terminal being coupled to a first power source line together with the first terminals of other unit circuits of the plurality of unit circuits, and

the eighth terminal being coupled to ~~a second~~ the second power source line, ~~line, which is held at a predetermined potential, together with the eighth terminals of other unit circuits of the plurality of unit circuits, and~~

~~_____ the electronic circuit including a plurality of control circuits, each setting the potential of the first power source line to a plurality of potentials or controlling the supply and the disconnection of a driving voltage to the first power source.~~

6. (Previously Presented) The electronic circuit according to Claim 1, transistors included in each of the unit circuits including only the first transistor, the second transistor, and the third transistor.

7. (Previously Presented) The electronic circuit according to Claim 3, an electronic element being coupled to the second terminal.

8. (Previously Presented) The electronic circuit according to Claim 1, the electronic element being a current-driven element.

9. (Currently Amended) The electronic circuit according to ~~Claim 2~~ Claim 4,

each of the control circuits being a fourth transistor having a ninth terminal and a tenth terminal, and

the ninth terminal being coupled to the driving voltage, and

the tenth terminal being coupled to the first power source line.

10. (Currently Amended) ~~The method~~ A method of driving an electronic circuit ~~having that has~~ a plurality of unit circuits, ~~the electronic circuit including~~ circuits and a plurality of first power source lines, lines each of ~~the plurality of unit circuits~~ comprising which includes:

a first transistor ~~coupled in series to an electronic element and that is~~ coupled to ~~the one first power source line of the plurality of first power source line~~ lines;

a second transistor that controls an electrical connection between a drain of the first transistor and a gate of the first transistor; and

a third transistor that controls an electrical connection between the first transistor and a current source ~~outputting that outputs~~ a data current that sets ~~an electrical connection~~ a conduction state of the first transistor,

the method comprising:

~~a first step of switching the third transistor to an on state to supply~~ supplying the data current to the first transistor ~~to set the electrical connection state of the first transistor; and~~ through the third transistor, and

~~a second step of switching the third transistor to an off state and making a current corresponding to the electrical connection state of the first transistor flow between the first power source line and the electronic element,~~ supplying a driving current whose level corresponds to the conduction state of the first transistor to an electronic element, the driving current flowing between the one first power source line and the electronic element through the first transistor,

the one first power source line being electrically disconnected from a driving voltage during at least for a part of the time a first period in which in the first step supplying of the data current is supplied to the first transistor, the first power source line being electrically disconnected from a driving voltage, and to the first transistor is performed, and

at least for part of the time period in which the second step is performed, the driving voltage being applied to either the drain of the first transistor or the source of the first transistor through the first power source line the driving voltage being applied to a drain of the first transistor or a source of the first transistor through the first power source line during at least a part of a second period in which the supplying of the driving current to the electronic element is performed.

11. (Currently Amended) A method of driving an electronic circuit ~~having that~~ has a plurality of first power source lines and a plurality of unit circuits, circuits, each of ~~the plurality of unit circuits comprising which includes:~~

a first transistor ~~having that has~~ a first terminal, a second terminal, and a first control terminal; terminal, the first terminal being coupled to one first power source line of the plurality of the first power source lines;

a second transistor ~~having that has~~ a third terminal and a fourth terminal, the third terminal being coupled to the first control terminal, and the fourth terminal being coupled to the second terminal;

a third transistor ~~having that has~~ a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal; and

a capacitive element ~~having that has~~ a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal,

~~the first terminal being coupled to a first power source line together with the first terminals of a series of unit circuits of the plurality of unit circuits,~~

the method comprising:

supplying an electric charge to the capacitive element, a quantity of the electric charge corresponding to a data current flowing through the third transistor; and

supplying a driving current to an electronic element, the driving current flowing between the one first power source line and the electronic element through the first transistor, and the driving current having a level corresponding to the quantity of the electric charge,

the one first power source line being electrically disconnected from a driving voltage during at least a part of a first period in which the supplying of the electric charge to the capacitive element is performed, and

the driving voltage being applied to the first terminal of the first transistor through the one first power source line during at least a part of a second period in which the supplying of the driving current to the electronic element is performed.

~~a step of electrically disconnecting the first terminals of the series of unit circuits from a driving voltage by electrically coupling the first power source line from the driving voltage, causing a quantity of charge corresponding to the current level of a current flowing through the first transistor to be held in the capacitive element by switching the third transistor of each of the series of unit circuits to an on state, and applying a voltage corresponding to the quantity of charge to the first control terminal to set an electrical connection state between the first terminal and the second terminal; and~~

~~a step of switching the third transistor to an off state and electrically connecting the first terminal of each of the series of unit circuits to the driving voltage.~~

12. (Currently Amended) A method of driving an electronic circuit ~~having that~~
has a plurality of first power source lines, a plurality of second power source lines and a

plurality of unit circuits, circuits each of the ~~plurality of unit circuits comprising which~~
includes:

a first transistor ~~having that has~~ a first terminal, a second terminal, and a first control ~~terminal; terminal,~~ the first terminal being coupled to one first power source line of the plurality of first power source lines;

a second transistor ~~having that has~~ a third terminal and a fourth terminal, the third terminal being coupled to the first control terminal, the fourth terminal being coupled to the second terminal;

a third transistor ~~having that has~~ a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal; and

a capacitive element ~~having that has~~ a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third ~~terminal; terminal~~ and the eighth terminal being coupled to one second power source line of the plurality of second power source lines,

~~the first terminal being coupled to a first power source line together with the first terminals of a series of unit circuits of the plurality of unit circuits, and~~

~~the eighth terminal being coupled to a second power source line together with the eighth terminals of the series of unit circuits of the plurality of unit circuits,~~

the method comprising:

~~supplying an electric charge to the capacitive element, a quantity of the electric charge corresponding to a data current flowing through the third transistor, and~~

~~supplying a driving current to an electronic element, the driving current flowing between the one first power source line and the electronic element through the first transistor, and the driving current having a level corresponding to the quantity of the electric charge,~~

the one first power source line being electrically disconnected from a driving voltage during at least a part of a first period in which the supplying of the electric charge to the capacitive element is performed,

the driving voltage being applied to the first terminal of the first transistor through the one first power source line during at least a part of a second period in which the supplying of the driving current to the electronic element is performed, and

the one second power source line being held at a predetermined voltage during the first period and the second period.

~~a step of electrically disconnecting the first terminals of the series of unit circuits from a driving voltage by electrically disconnecting the first power source line from the driving voltage, causing a quantity of charge corresponding to the current level of a current flowing through the first transistor to be held in the capacitive element by switching the third transistor of each of the series of unit circuits to an on state, and applying a voltage corresponding to the quantity of charge to the first control terminal to set an electrical connection state between the first terminal and the second terminal; and~~

~~a step of switching the third transistor to an off state and electrically connecting the first terminal of each of the series of unit circuits to the driving voltage.~~

13. (Withdrawn) An electro-optical device, comprising:

a plurality of scanning lines;

a plurality of data lines;

a plurality of first power source lines; and

a plurality of unit circuits,

each of the plurality of unit circuits comprising:

a first transistor coupled in series to an electro-optical element and connected to the corresponding first power source line of the plurality of first power source lines;

a second transistor that controls an electrical connection between a drain of the first transistor and a gate of the first transistor; and

a third transistor that controls an electrical connection between the first transistor and the corresponding data line of the plurality of data lines, the third transistor being controlled by a scanning signal supplied through the corresponding scanning line of the plurality of scanning lines,

at least for part of the time period in which the third transistor is in an on state, the corresponding first power source line being electrically disconnected from a driving voltage, and a data current supplied from the corresponding data line flows through the first transistor to set the electrical connection state of the first transistor, and

at least for part of the time period in which the third transistor is in an off state, the driving voltage being applied to either the drain of the first transistor or the source of the first transistor, and a current corresponding to the electrical connection state of the first transistor set by the data current flows between the corresponding first power source line and the electro-optical element.

14. (Withdrawn) An electro-optical device comprising a plurality of scanning lines, a plurality of data lines, and a plurality of unit circuits, each of the plurality of unit circuits comprising:

a first transistor having a first terminal, a second terminal, and a first control terminal;

a second transistor having a third terminal, a fourth terminal, and a second control terminal, the third terminal being coupled to the first control terminal;

a third transistor having a fifth terminal, a sixth terminal, and a third control terminal, the fifth terminal being coupled to the first terminal, the sixth terminal being

coupled to one data line of the plurality of data lines, the third control terminal being coupled to one scanning line of the plurality of scanning lines;

a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal; and

an electro-optical element coupled to the second terminal,

the first terminal being coupled to a first power source line together with the first terminals of other unit circuits of the plurality of unit circuits, and

the electro-optical device including a plurality of control circuits, each setting the potential of the first power source line to a plurality of potentials or controlling the supply and the disconnection of a driving voltage to the first power source line.

15. (Withdrawn) An electro-optical device, comprising a plurality of scanning lines, a plurality of data lines, and a plurality of unit circuits, each of the plurality of unit circuits comprising:

a first transistor having a first terminal, a second terminal, and a first control terminal;

a second transistor having a third terminal, a fourth terminal, and a second control terminal, the third terminal being coupled to the first control terminal, the second transistor controlling an electrical connection between the second terminal and the fourth terminal;

a third transistor having a fifth terminal, a sixth terminal, and a third control terminal, the fifth terminal being coupled to the first terminal, the sixth terminal being coupled to one data line of the plurality of data lines, the third control terminal being coupled to one scanning line of the plurality of scanning lines; and

a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal,

the first terminal being coupled to a first power source line together with the first terminals of other unit circuits of the plurality of unit circuits, and

the eighth terminal being coupled to a second power source line, which is held at a predetermined potential, together with the eighth terminals of other unit circuits of the plurality of unit circuits, and

the electro-optical device including a plurality of control circuits, each setting a potential of the first power source line to a plurality of potentials or controlling the supply and the disconnection of a driving voltage to the first power source line.

16. (Withdrawn) The electro-optical device according to Claim 13, transistors included in each of the unit circuits having only the first transistor, the second transistor, and the third transistor.

17. (Withdrawn) The electro-optical device according to Claim 14, each of the control circuits being a fourth transistor having a ninth terminal and a tenth terminal, and the ninth terminal being coupled to the driving voltage and the tenth terminal being coupled to the first power source line.

18. (Withdrawn) An electro-optical device according to Claim 13, the electro-optical element being an EL element.

19. (Withdrawn) A method of driving an electro-optical device, the electro-optical device comprising:

a plurality of scanning lines;

a plurality of data lines;

a plurality of first power source lines; and

a plurality of unit circuits,

each of the plurality of unit circuits comprising:

a first transistor coupled in series to an electro-optical element and coupled to the corresponding first power source line of the plurality of first power source lines;

a second transistor that controls an electrical connection between a drain of the first transistor and a gate of the first transistor; and

a third transistor that controls an electrical connection between the first transistor and the corresponding data line of the plurality of data lines, the third transistor being controlled by a scanning signal supplied through the corresponding scanning line of the plurality of scanning lines,

the method comprising:

a first step of, when the third transistor is in an on state and the corresponding first power source line is electrically disconnected from a driving voltage, making a data current supplied from the corresponding data line flow through the first transistor to set the electrical connection state of the first transistor; and

a second step of, when the third transistor is in an off state and the driving voltage is applied to either a drain of the first transistor or a source of the first transistor through the corresponding first power source line, making a current corresponding to the electrical connection of the first transistor set by the data current flow between the corresponding first power source line and the electro-optical element.

20. (Withdrawn) A method of driving an electro-optical device having a plurality of unit circuits, each of the plurality of unit circuits comprising:

a first transistor having a first terminal, a second terminal, and a first control terminal;

a second transistor having a third terminal, a fourth terminal, and a second control terminal, the third terminal being coupled to the first control terminal, the fourth terminal being coupled to the second terminal;

a third transistor having a fifth terminal, a sixth terminal, and a third control terminal, the fifth terminal being coupled to the first terminal;

a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal; and

an electro-optical element coupled to the second terminal,

the sixth terminal being coupled to one data line of a plurality of data lines,

the third control terminal being coupled to one scanning line of a plurality of scanning lines,

the first terminal being coupled to a first power source line together with the first terminals of other unit circuits of the plurality of unit circuits,

the method comprising:

a step of electrically disconnecting the first terminals of a series of the unit circuits from a driving voltage by electrically disconnecting the first power source line from the driving voltage, causing a quantity of charge corresponding to the current level of a current flowing through the first transistor to be held in the capacitive element by switching the third transistor of each of the series of unit circuits to an on state, and applying a voltage corresponding to the quantity of charge to the first control terminal to set an electrical connection state between the first terminal and the second terminal; and

a step of switching the third transistor to an off state and electrically connecting the first terminal of each of the series of unit circuits to the driving voltage through the first power source line.

21. (Withdrawn) A method of driving an electro-optical device having a plurality of unit circuits, each of the plurality of unit circuits comprising:

a first transistor having a first terminal, a second terminal, and a first control terminal;

a second transistor having a third terminal, a fourth terminal, and a second control terminal, the third terminal being coupled to the first control terminal, the fourth terminal being coupled to the second terminal;

a third transistor having a fifth terminal, a sixth terminal, and a third control terminal, the fifth terminal being coupled to the first terminal;

a capacitive element having a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal; and

an electro-optical element coupled to the second terminal,

the sixth terminal being coupled to one data line of a plurality of data lines,

the third control terminal being coupled to one scanning line of a plurality of scanning lines,

the first terminal being coupled to a first power source line together with the first terminals of other unit circuits of the plurality of unit circuits,

the eighth terminal being coupled to a second power source line together with the eighth terminals of the other unit circuits of the plurality of unit circuits,

the method comprising:

a step of electrically disconnecting the first terminals of a series of the unit circuits from a driving voltage by electrically disconnecting the first power source line from the driving voltage, causing a quantity of charge corresponding to the current level of a current flowing through the first transistor to be held in the capacitive element by switching the third transistor of each of the series of unit circuits to an on state, and applying a voltage corresponding to the quantity of charge to the first control terminal to set an electrical connection state between the first terminal and the second terminal; and

a step of switching the third transistor to an off state and electrically connecting the first terminal of each of the series of unit circuits to the driving voltage through the first power source line.

22. (Original) An electronic apparatus equipped with the electronic circuit according to Claim 1.

23. (Withdrawn) An electronic apparatus equipped with the electro-optical device according to Claim 13.

24. (New) The method according to claim 11,
the data current flowing through the first transistor.

25. (New) A method of driving an electronic circuit that has a plurality of unit circuits and a plurality of first power source lines each of which includes:

a first transistor that has a first terminal, a second terminal, and a first control terminal, the first terminal being coupled to one first power source line of the plurality of first power source lines;

a second transistor that has a third terminal and a fourth terminal, the third terminal being coupled to the first control terminal, and the fourth terminal being coupled to the second terminal;

a third transistor that has a fifth terminal and a sixth terminal, the fifth terminal being coupled to the first terminal; and

a capacitive element that has a seventh terminal and an eighth terminal, the seventh terminal being coupled to the first control terminal and the third terminal,

the method comprising:

supplying an electric charge to the capacitive element, a quantity of the electric charge corresponding to a data signal supplied through the third transistor, and

supplying a driving current to an electronic element, the driving current flowing between the one first power source line and the electronic element through the first transistor, and the driving current having a level corresponding to the quantity of the electric charge,

the one first power source line being electrically disconnected from a driving voltage during at least a part of a first period in which the supplying of the electric charge to the capacitive element is performed, and

the driving voltage being applied to the first terminal of the first transistor through the one first power source line during at least a part of a second period in which the supplying of the driving current to the electronic element is performed.